# Territory-wide System Assessment (S.3) Mathematics Past Papers Analysis Dimensions Distribution 

## Scope of the Assessment

According to the documents Syllabuses for Secondary Schools - Mathematics (Secondary 1-5), 1999 and Mathematics Curriculum: Basic Competency at the end of Key Stage 3 (Trial Version)

- Focus on basic and important areas of the S. 1 to 3 curriculum
- Test on the concepts, knowledge, skills and applications in these areas
- Three dimensions are covered: Number \& Algebra, Measures, Shape \& Spaces and Data Handling

Based on the dimensions distributions of the past papers, 'Number \& Algebra' and 'Measures, Shape \& Spaces' respectively occupied around $40-50 \%$ each year. Besides, 'Data Handling' only occupied around $10-15 \%$ each year. Teachers are suggested to enhance students' practices on the two dimensions 'Number \& Algebra' and 'Measures, Shape \& Spaces’.

## Dimensions Distributions:

[Year 2013]

| $\underbrace{}_{\text {Dimension }}$ Sub-paper | 9ME1 | 9ME2 | 9ME3 | 9ME4 | $\leftarrow$ around $45-55 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Algebra | $\begin{gathered} 35 \text { marks } \\ (51.5 \%) \end{gathered}$ | $\begin{gathered} 34 \text { marks } \\ (50.0 \%) \end{gathered}$ | $\begin{gathered} 32 \text { marks } \\ (47.1 \%) \end{gathered}$ | $\begin{gathered} 32 \text { marks } \\ (47.1 \%) \end{gathered}$ |  |
| Measures, Shape and Space | $\begin{gathered} 26 \text { marks } \\ (38.2 \%) \end{gathered}$ | $\begin{gathered} 25 \text { marks } \\ (36.8 \%) \end{gathered}$ | $\begin{aligned} & 29 \text { marks } \\ & (42.6 \%) \end{aligned}$ | $\begin{gathered} 27 \text { marks } \\ (39.7 \%) \end{gathered}$ | $\leqslant$ around 35-45\% |
| Data Handling | $\begin{aligned} & 7 \text { marks } \\ & (10.3 \%) \end{aligned}$ | $\begin{gathered} 8 \text { marks } \\ (11.8 \%) \end{gathered}$ | $\begin{gathered} 6 \text { marks } \\ (8.8 \%) \end{gathered}$ | $\begin{aligned} & 8 \text { marks } \\ & (11.8 \%) \end{aligned}$ | $\leqslant$ around 5-15\% |
| Total | $\begin{aligned} & 68 \text { marks } \\ & (100.0 \%) \end{aligned}$ | $\begin{aligned} & 67 \text { marks } \\ & (100.0 \%) \end{aligned}$ | $\begin{aligned} & 67 \text { marks } \\ & (100.0 \%) \end{aligned}$ | 67 marks (100.0\%) |  |

[Year 2012]

| $\mathrm{Dimension}_{\text {Sub-paper }}$ | 9ME1 | 9ME2 | 9ME3 | 9ME4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Algebra | $\begin{aligned} & 33 \text { marks } \\ & (47.1 \%) \end{aligned}$ | $\begin{gathered} 32 \text { marks } \\ (45.7 \%) \end{gathered}$ | $\begin{gathered} 34 \text { marks } \\ (47.2 \%) \end{gathered}$ | $\begin{aligned} & 31 \text { marks } \\ & (45.1 \%) \end{aligned}$ | $\leftarrow$ around $45-50 \%$ |
| Measures, Shape and Space | $\begin{gathered} 30 \text { marks } \\ (42.9 \%) \end{gathered}$ | $\begin{gathered} 30 \text { marks } \\ (42.9 \%) \end{gathered}$ | $\begin{gathered} 28 \text { marks } \\ (38.9 \%) \end{gathered}$ | $\begin{gathered} 29 \text { marks } \\ (40.8 \%) \end{gathered}$ | $\leftarrow$ around 35-45\% |
| Data Handling | 7 marks <br> (10.0\%) | 8 marks <br> (11.4\%) | $10 \text { marks }$ | $\begin{gathered} 10 \text { marks } \\ (14.1 \%) \end{gathered}$ | $\leftarrow$ around $10-15 \%$ |
| Total | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 72 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 71 \text { marks } \\ (100 \%) \end{gathered}$ |  |

[Year 2011]

| Sub-paper <br> Dimension | 9ME1 | 9ME2 | 9ME3 | 9ME4 | $\leqslant$ around $40-55 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Algebra | $\begin{aligned} & 30 \text { marks } \\ & (42.3 \%) \end{aligned}$ | 35 marks $(49.3 \%)$ | $\begin{gathered} 36 \text { marks } \\ (50.7 \%) \end{gathered}$ | $\begin{gathered} 36 \text { marks } \\ (51.4 \%) \end{gathered}$ |  |
| Measures, Shape and Space | $\begin{gathered} 30 \text { marks } \\ (42.3 \%) \end{gathered}$ | $\begin{gathered} 27 \text { marks } \\ (38.0 \%) \end{gathered}$ | $\begin{gathered} 28 \text { marks } \\ (39.4 \%) \end{gathered}$ | $\begin{aligned} & 26 \text { marks } \\ & (37.1 \%) \end{aligned}$ | $\leqslant$ around 35-45\% |
| Data Handling | $\begin{gathered} 11 \text { marks } \\ (15.5 \%) \end{gathered}$ | $\begin{aligned} & 9 \text { marks } \\ & (12.7 \%) \end{aligned}$ | $\begin{aligned} & 7 \text { marks } \\ & (9.9 \%) \end{aligned}$ | $\begin{aligned} & 8 \text { marks } \\ & (11.4 \%) \end{aligned}$ | $\leqslant$ around 5-20\% |
| Total | $\begin{gathered} 71 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 71 \text { marks } \\ (100 \%) \end{gathered}$ | 71marks <br> (100\%) | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ |  |

[Year 2010]

| Sub-paper <br> Dimension | 9ME1 | 9ME2 | 9ME3 | 9ME4 | $\leqslant$ around $40-50 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Algebra | $\begin{aligned} & 31 \text { marks } \\ & (44.3 \%) \end{aligned}$ | $\begin{gathered} 35 \text { marks } \\ (49.3 \%) \end{gathered}$ | $\begin{gathered} 32 \mathrm{marks} \\ (45.7 \%) \end{gathered}$ | $\begin{aligned} & 31 \text { marks } \\ & (44.9 \%) \end{aligned}$ |  |
| Measures, Shape and Space | $\begin{aligned} & 31 \text { marks } \\ & (44.3 \%) \end{aligned}$ | $\begin{gathered} 28 \text { marks } \\ (39.4 \%) \end{gathered}$ | $\begin{aligned} & 27 \text { marks } \\ & (38.6 \%) \end{aligned}$ | $\begin{gathered} 28 \text { marks } \\ (40.6 \%) \end{gathered}$ | $\leqslant$ around 35-45\% |
| Data Handling | $\begin{aligned} & 8 \text { marks } \\ & (11.4 \%) \end{aligned}$ | 8 marks $(11.3 \%)$ <br> (11.3\%) | $\begin{gathered} 11 \text { marks } \\ (15.7 \%) \end{gathered}$ | $10 \text { marks }$ | $\leqslant$ around $10-15 \%$ |
| Total | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 71 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 69 \text { marks } \\ (100 \%) \end{gathered}$ |  |

[Year 2009]
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\begin{array}{|c|c|c|c|c|}\hline \text { Sub-paper } & \text { 9ME1 } & \text { 9ME2 } & \text { 9ME3 } & \text { 9ME4 } \\
\hline \text { Dimension } & 26 \text { marks } \\
(37.7 \%)\end{array}
$$ $$
\begin{array}{c}30 \text { marks } \\
(43.5 \%)\end{array}
$$ \begin{array}{c}33 marks <br>

(48.5 \%)\end{array}\right)\)| 32 marks |
| :---: |
| $(47.1 \%)$ |$\leftarrow$ around $35-50 \%$

[Year 2008]

| Sub-paper <br> Dimension | 9ME1 | 9ME2 | 9ME3 | 9ME4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Algebra | $\begin{gathered} 33 \text { marks } \\ (47.1 \%) \end{gathered}$ | $\begin{gathered} 33 \text { marks } \\ (47.1 \%) \end{gathered}$ | $\begin{gathered} 31 \text { marks } \\ (44.3 \%) \end{gathered}$ | $\begin{aligned} & 30 \text { marks } \\ & (42.3 \%) \end{aligned}$ | $\leftarrow$ around $40-50 \%$ |
| Measures, Shape and Space | $\begin{gathered} 29 \text { marks } \\ (41.4 \%) \end{gathered}$ | $\begin{gathered} 28 \text { marks } \\ (40 \%) \end{gathered}$ | $\begin{aligned} & 31 \text { marks } \\ & (44.3 \%) \end{aligned}$ | $\begin{gathered} 31 \text { marks } \\ (43.7 \%) \end{gathered}$ | $\leftarrow$ around $40-45 \%$ |
| Data Handling | 8 marks <br> (11.4\%) | 9 marks <br> (12.9\%) | $\begin{aligned} & 8 \text { marks } \\ & (11.4 \%) \end{aligned}$ | $\begin{gathered} 10 \text { marks } \\ (14.1 \%) \end{gathered}$ | $\leftarrow$ around $10-15 \%$ |
| Total | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 70 \text { marks } \\ (100 \%) \end{gathered}$ | $\begin{gathered} 71 \text { marks } \\ (100 \%) \end{gathered}$ |  |

[Year 2007]

| Sub-paper | 9ME1 | 9ME2 | 9ME3 | 9ME4 |
| :---: | :---: | :---: | :---: | :---: |
| Dimension | 27 marks <br> $(41.5 \%)$ | 27 marks <br> $(41.5 \%)$ | 27 marks <br> $(41.5 \%)$ | 25 marks <br> $(38.5 \%)$ |
| Number and Algebra | $\leftarrow$ around $35-45 \%$ |  |  |  |
| Measures, Shape and <br> Space | 27 marks <br> $(41.5 \%)$ | 26 marks <br> $(40 \%)$ | 28 marks <br> $(43.1 \%)$ | 29 marks <br> $(44.6 \%)$ |
| Data Handling | 11 marks <br> $(16.9 \%)$ | 12 marks <br> $(18.5 \%)$ | 10 marks <br> $(15.4 \%)$ | 11 marks <br> $(16.9 \%)$ |
| Total $40-45 \%$ |  |  |  |  |
|  | 65 marks <br> $(100 \%)$ | 65 marks <br> $(100 \%)$ | 65 marks <br> $(100 \%)$ | 65 marks <br> $(100 \%)$ |

[Year 2006]

| Sub-paper | 9ME1 | 9ME2 | 9ME3 | 9ME4 |
| :---: | :---: | :---: | :---: | :---: |
| Dimension | 26 marks <br> $(37.7 \%)$ | 27 marks <br> $(37.5 \%)$ | 29 marks <br> $(41.4 \%)$ | 24 marks <br> $(33.8 \%)$ |
| Number and Algebra | $\leftarrow$ around $35-45 \%$ |  |  |  |
| Measures, Shape and | 33 marks <br> $(47.8 \%)$ | 33 marks <br> $(45.8 \%)$ | 30 marks <br> $(42.9 \%)$ | 35 marks <br> $(49.3 \%)$ |
| Space | $\leftarrow$ around $40-50 \%$ |  |  |  |
| Data Handling | 10 marks <br> $(14.5 \%)$ | 12 marks <br> $(16.7 \%)$ | 11 marks <br> $(15.7 \%)$ | 12 marks <br> $(16.9 \%)$ |$\leftarrow$ around $10-20 \%$

